

Title (en)

Method and apparatus for supply voltage glitch detection in a monolithic integrated circuit device

Title (de)

Verfahren und Vorrichtung zur Versorgungsspannungs-Störsignal detektion in einer monolithischen integrierten Schaltvorrichtung

Title (fr)

Procédé et appareil de détection de signaux transitoires de tension d'alimentation dans un dispositif à circuit intégré monolithique

Publication

EP 2982997 A1 20160210 (EN)

Application

EP 14179710 A 20140804

Priority

EP 14179710 A 20140804

Abstract (en)

A monolithic integrated circuit device may include a supply voltage glitch detector (10) for detecting improper supply voltage conditions. Advantageously, the detection threshold of the supply voltage glitch detector is adaptively set based on the mode of operation of the device or a particular part of the device, which is internally known to the device based on certain inputs received by the device, such as commands, interrupts, control signals, and so forth.

IPC 8 full level

G01R 31/28 (2006.01); **G01R 19/165** (2006.01); **G01R 19/25** (2006.01); **G01R 19/30** (2006.01); **G01R 31/30** (2006.01); **G01R 31/317** (2006.01)

CPC (source: EP)

G01R 19/16519 (2013.01); **G01R 19/16552** (2013.01); **G01R 19/2506** (2013.01); **G01R 31/2879** (2013.01); **G01R 31/3004** (2013.01);
G06F 21/755 (2017.08); **Y04S 40/20** (2013.01)

Citation (applicant)

- DOMINIK GRUBER ET AL.: "A Voltage Reference with On-Chip Trimmable Temperature Coefficient and Offset Voltage, MIXDES 2011, 18th International Conference", MIXED DESIGN OF INTEGRATED CIRCUITS AND SYSTEMS, 16 June 2011 (2011-06-16), pages 231 - 236
- JUNG-LIN YANG ET AL., TUNABLE DELAY ELEMENT FOR LOW POWER VLSI CIRCUIT DESIGN, IEEE, 2006, pages 1 - 4

Citation (search report)

- [X] US 2011074398 A1 20110331 - BARTON AARON M [US], et al
- [X] US 2003226082 A1 20031204 - KIM CHAN-YONG [KR], et al
- [X] US 7003421 B1 20060221 - ALLEN III ERNEST [US], et al
- [X] DE 10120147 A1 20021031 - PHILIPS CORP INTELLECTUAL PTY [DE]
- [X] EP 0568440 A1 19931103 - SGS THOMSON MICROELECTRONICS [FR]
- [X] US 2006214672 A1 20060928 - JENKINS KEITH A [US], et al
- [X] US 2006033486 A1 20060216 - CHOU KUO-YU [TW]
- [X] EP 1804199 A1 20070704 - ST MICROELECTRONICS SA [FR]
- [X] WO 2006114727 A1 20061102 - KONINKL PHILIPS ELECTRONICS NV [NL], et al
- [A] WO 9850859 A1 19981112 - ERICSSON TELEFON AB L M [SE]
- [A] US 6392432 B1 20020521 - JAISOMPORN YONG [TH], et al
- [A] MICHAEL RIZK ET AL: "Optimizing the automatic selection of spike detection thresholds using a multiple of the noise level", MEDICAL & BIOLOGICAL ENGINEERING & COMPUTING, SPRINGER, BERLIN, DE, vol. 47, no. 9, 10 February 2009 (2009-02-10), pages 955 - 966, XP019835354, ISSN: 1741-0444

Cited by

CN110208722A; GB2610880A; GB2610880B; US11250168B2; WO2023041911A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2982997 A1 20160210; EP 2982997 B1 20240508

DOCDB simple family (application)

EP 14179710 A 20140804